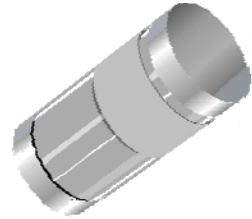


## 500mW Surface Mount Zener Diodes

### Features

- Planar Die Construction
- 500mW Power Dissipation
- Very Sharp Reverse Characteristic
- Very High Stability
- Low Reverse Current Level
- Standard Zener Voltage Tolerance is  $\pm 5\%$
- Ideally Suited for Automated Assembly Processes
- RoHS Compliant



MiniMelf



### Mechanical Data

<b>Case:</b>	Molded Glass MiniMelf
<b>Terminals:</b>	Solderable per MIL-STD-750, Method 2026
<b>Polarity:</b>	Color band denotes cathode end
<b>Weight:</b>	Approx. 0.03 grams

### Maximum Ratings & Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	Value	Unit	Conditions
<b>P<sub>D</sub></b>	Power Dissipation at $T_a=25^{\circ}C$	500	mW	
<b>V<sub>F</sub></b>	Forward Voltage	1.5	V	$I_F=200mA$
<b>R<sub>thJA</sub></b>	Thermal Resistance Junction to Ambient	0.3	K/mW	
<b>T<sub>J</sub></b>	Junction Temperature	175	$^{\circ}C$	
<b>T<sub>STG</sub></b>	Storage Temperature Range	-65 to +175	$^{\circ}C$	

**Note:** Valid provided that leads at a distance of 8mm from case are kept at ambient temperature.

## 500mW Surface Mount Zener Diodes

### ZMMC2V4 - ZMMC100

P/N	Marking Code	Normal Zener Voltage				Max. Zener impedance			Max. reverse leakage current	
		VZ @ IZT				ZZT @ IZT	Zzk @ Izk		ID @ VR	
		Nom.(V)	Min. (V)	Max. (V)	IZT (mA)	Ω	Ω	mA	μA	VR (V)
ZMMC2V4	C2V4	2.4	2.28	2.56	5.0	85	600	1	50	1
ZMMC2V7	C2V7	2.7	2.5	2.9	5.0	85	600	1	10	1
ZMMC3V0	C3V0	3.0	2.8	3.2	5.0	85	600	1	4	1
ZMMC3V3	C3V3	3.3	3.1	3.5	5.0	85	600	1	2	1
ZMMC3V6	C3V6	3.6	3.4	3.8	5.0	85	600	1	2	1
ZMMC3V9	C3V9	3.9	3.7	4.1	5.0	85	600	1	2	1
ZMMC4V3	C4V3	4.3	4.0	4.6	5.0	75	600	1	1	1
ZMMC4V7	C4V7	4.7	4.4	5.0	5.0	60	600	1	0.5	1
ZMMC5V1	C5V1	5.1	4.8	5.4	5.0	35	550	1	0.1	1
ZMMC5V6	C5V6	5.6	5.2	6.0	5.0	25	450	1	0.1	1
ZMMC6V2	C6V2	6.2	5.8	6.6	5.0	10	200	1	0.1	2
ZMMC6V8	C6V8	6.8	6.4	7.2	5.0	8	150	1	0.1	3
ZMMC7V5	C7V5	7.5	7.0	7.9	5.0	7	50	1	0.1	5
ZMMC8V2	C8V2	8.2	7.7	8.7	5.0	7	50	1	0.1	6
ZMMC9V1	C9V1	9.1	8.5	9.6	5.0	10	50	1	0.1	7
ZMMC10	C10V	10	9.4	10.6	5.0	15	70	1	0.1	7.5
ZMMC11	C11V	11	10.4	11.6	5.0	20	70	1	0.1	8.5
ZMMC12	C12V	12	11.4	12.7	5.0	20	90	1	0.1	9
ZMMC13	C13V	13	12.4	14.1	5.0	26	110	1	0.1	10
ZMMC15	C15V	15	13.8	15.6	5.0	30	110	1	0.1	11
ZMMC16	C16V	16	15.3	17.1	5.0	40	170	1	0.1	12
ZMMC18	C18V	18	16.8	19.1	5.0	50	170	1	0.1	14
ZMMC20	C20V	20	18.8	21.2	5.0	55	220	1	0.1	15
ZMMC22	C22V	22	20.8	23.3	5.0	55	220	1	0.1	17
ZMMC24	C24V	24	22.8	25.6	5.0	80	220	1	0.1	18
ZMMC27	C27V	27	25.1	28.9	5.0	80	220	1	0.1	20
ZMMC30	C30V	30	28	32	5.0	80	220	1	0.1	22
ZMMC33	C33V	33	31	35	5.0	80	220	1	0.1	24
ZMMC36	C36V	36	34	38	5.0	80	220	1	0.1	27
ZMMC39	C39V	39	37	41	2.5	90	500	1	0.1	30
ZMMC43	C43V	43	40	46	2.5	90	600	1	0.1	33

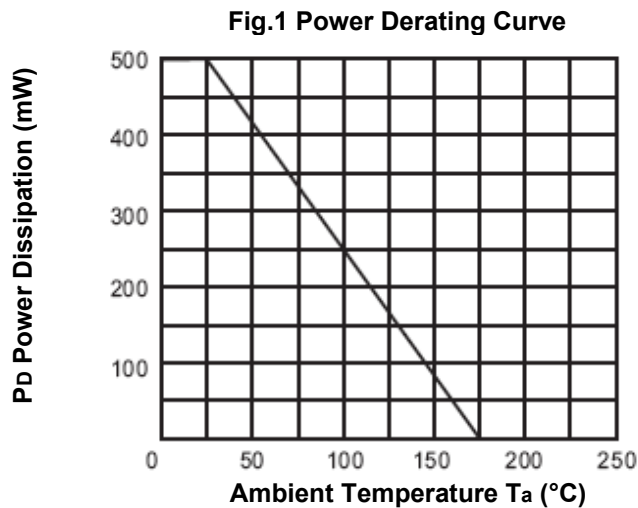
# 500mW Surface Mount Zener Diodes

## ZMMC2V4 - ZMMC100

P/N	Marking Code	Normal Zener Voltage				Max. Zener impedance			Max. reverse leakage current	
		Vz @ IZT				ZZT @ IZT	Zzk @ Izk		ID @ VR	
		Nom.(V)	Min. (V)	Max. (V)	IZT (mA)	Ω	Ω	mA	μA	VR (V)
ZMMC47	C47V	47	44	50	2.5	110	700	1	0.1	36
ZMMC51	C51V	51	48	54	2.5	125	700	0.5	0.1	39
ZMMC56	C56V	56	52	60	2.5	135	1000	0.5	0.1	43
ZMMC62	C62V	62	58	66	2.5	150	1000	0.5	0.1	47
ZMMC68	C68V	68	64	72	2.5	200	1000	0.5	0.1	51
ZMMC75	C75V	75	70	79	2.5	250	1500	0.5	0.1	56
ZMMC82	C82V	82	77	87	2.5	300	2000	0.5	0.1	62
ZMMC91	C91V	91	85	96	1.0	450	5000	0.1	0.1	68
ZMMC100	C100	100	94	106	1.0	450	5000	0.1	0.1	75

**Note:** Marking code is available in 2008.

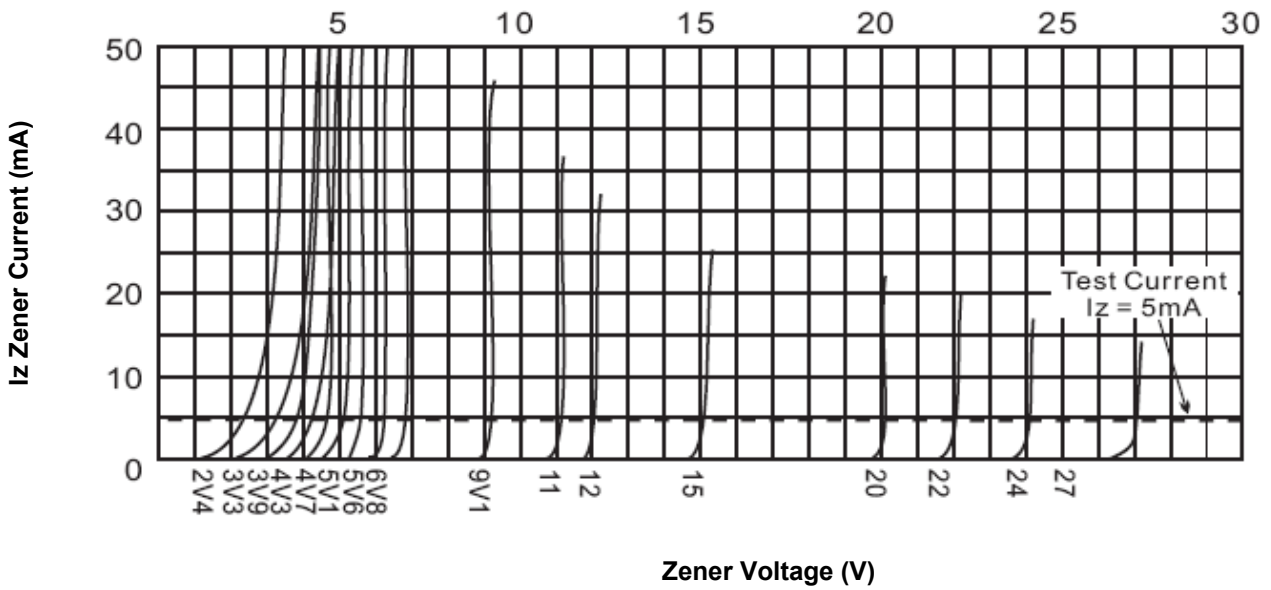
### Characteristics Curves



# 500mW Surface Mount Zener Diodes

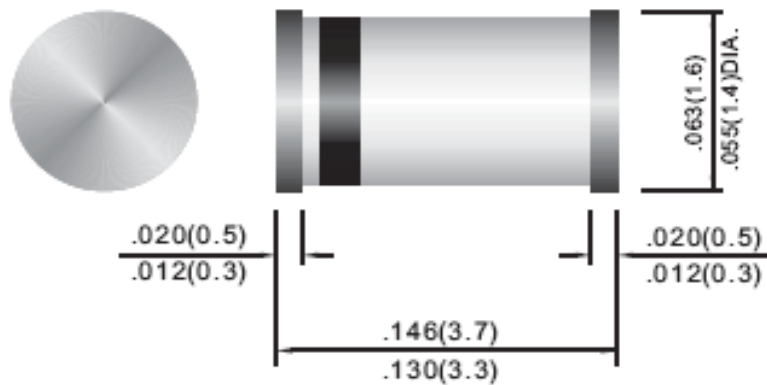
## ZMMC2V4 - ZMMC100

Fig.2 Breakdown Characteristics



Dimensions in inches (mm)

### MiniMelf



## 500mW Surface Mount Zener Diodes

ZMMC2V4 - ZMMC100

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